DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.15

SOURCE INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** SIR-001458 Address: 333 Burma Road **Date Inspected:** 25-Apr-2009

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Dao, Shangha

Quality Control Contact: William (Bill) Oak **Quality Control Present:** Yes No

Material transfer: Yes No N/A **Sampled Items:** Yes No N/A **Stock Transfer:** N/A OK to Cut: N/A Yes No Yes No **Rebar Test Witness:** N/A **Delayed/Cancelled:** N/A Yes No Yes No

Other: Coatings Inspection

Bridge No: 34-0006 **Component:** OBG 1BW,OBG 2BW,OBG 2BE,OBG,2AE

Bid Item: Lot No: 77, 78, 79 B265

Summary of Items Observed:

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following: OBG 1BW

ZPMC abrasive blasted substrate to SSPC SP-10 condition and applied Interzinc 22 to exterior surfaces.

CROSS BEAM

This assembly was relocated to the paint shop for application of Interfine 979 and all required testing.

Bikeway Brackets

Adhesion testing was performed on the re-applied Interzinc 22 coated surfaces which previously exhibited mud crack and the following values were observed, 1). 7.62Mpa 2). 9.07 Mpa the interiors still require the removal of fugitive abrasive materials.

OBG 2BW

Adhesion testing was performed on repaired areas which previously exhibited mud crack and the following values were observed 1). 9.36 Mpa 2). 14.14 Mpa. Interfine 979 mist coat was also applied to exterior surfaces.

OBG 2BE

Adhesion testing was performed on previous mud crack repair areas and the following values were observed, 1). 5. 07Mpa 2). 7.04 Mpa.

Counterweights

Eight counterweight assemblies had MEK tests performed and all testing rated 5 also chloride testing was performed and 10-20us/cm was observed. All tests performed on exterior surfaces and Interfine 979 mist coat was

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then applied.

OBG 2AE

Chloride testing and MEK testing was performed on the exterior of this segment and the following values were observed, chloride testing 10-20us/cm, MEK 5 rating.

Note: All inspection and testing was performed jointly with ZPMC&ABF QA/QC representatives and Caltrans QA Lumley also present was International Protective Coatings technical service representative Zili Peng.

Summary of Conversations:

Both Caltrans QA Inspectors Lumley and Jordan have repeatedly requested ZPMC QC representatives to assure that ZPMC applicators do not apply excess Interzinc 22 to the assemblies being coated to prevent and eliminate removal and replacement of the coating due to mud cracking.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang. (858) 699-9549, who represents the Office of Structural Materials for your project.

Inspected By:	Lumley, James	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer